IN THE CLAIMS

Please amend the claims to the following.

1. (Currently Amended) An apparatus comprising:

a general input/output communication port to implement a communication stack including a physical layer, a data link layer and a transaction layer, the transaction layer to ~~include~~ ~~assembling~~ assemble a packet header for a ~~request~~ transaction packet ~~to one or more logical devices~~, the packet header to include ~~including~~:

a format field to ~~partially specify a format for the packet header, to specify~~ indicate whether the ~~request~~ transaction packet includes a data payload and to specify a size of the packet header; and

a type field to specify a transaction type, the transaction type ~~to include at least one~~ to be selected from the following group of: a memory request, an input/output request, a configuration request and a message request,

wherein the format field and the type field together indicate a packet type ~~specify the format for the packet header~~.

2-4. (Canceled).

5. (Currently Amended) The apparatus of claim 1, wherein the format field and the type field are located in the first byte of the packet header, and wherein the packet type is selected from a group consisting of a memory read request, a memory write request, an input/output (IO) read request, an IO write request, a configuration read, a configuration write, a message request, a message request with data, a message for advanced switching, a completion without data, a completion with data, and a completion for lock memory read .

6. (Currently Amended) An apparatus comprising:

a general input/output communication port to implement a communication stack including a physical layer, a data link layer and a transaction layer, the transaction layer to ~~include disassembling~~ disassemble a packet header for a ~~request transaction~~ packet to be received at the general input/output communication port, the packet header to include ~~including~~:

a format field ~~to partially specify a format for the packet header,~~ to specify whether the ~~request transaction~~ packet includes a data payload and to specify a size of the packet header; and

a type field to specify a transaction type, the transaction type to include at least one selected from the following group of: a memory request, an input/output request, a configuration request and a message request,

an additional field to hold additional information, wherein the format field and the type field together specify the type of additional information to be held in the additional field. ~~the format for the packet header~~.

7-9. (Canceled).

10. (Currently Amended) The apparatus of claim 6, wherein the additional field is to hold byte enable

information in response to the format field and the type field including a first value, the additional field includes completion status information in response to the format field and the type field including a second value, and the additional field includes message code information in response to the format field and the type field including a third value. ~~the format field and the type field are located in the first byte of the packet header~~.

11. (Currently Amended) A system comprising:

a transmitting device to include a general input/output communication port to implement a communication stack including a physical layer, a data link layer and a transaction layer, the transaction layer to ~~include assembling~~ assemble a packet header for a ~~request~~ transaction packet ~~to one or more logical devices~~, the packet header including:

a format field ~~to partially specify a format for the packet header,~~ to specify whether the ~~request~~ transaction packet includes a data payload and to specify a size of the packet header; ~~and~~

a type field to specify a transaction type, the transaction type to include at least one selected from the following group of: a memory request, an input/output request, a configuration request and a message request, wherein the format field and the type field together specify the format for the packet header; and

an additional field to hold additional information; and

a receiving device to receive the packet header from the transmitting device ~~include the logical device, the receiving device to receive the packet header relating to the request transaction packet to the logical device, the packet header received at a general input/output communication port,~~ the receiving device to implement the communication stack that includes the data link layer, the physical layer and the transaction layer, wherein the transaction layer is to ~~include disassembling~~ disassemble the packet header, the transaction layer to determine a type of additional information in the additional field based on the format field and the type field together. ~~relating to the request transaction packet for the logical device to respond to the request transaction packet~~.

12-14. (Canceled).

15. (Currently Amended). The system of claim 11, wherein the transaction layer to determine a type of additional information in the additional field based on the format and the type field together comprises

determining the additional field is a byte enable field including byte enable information in response to the format field and type field together indicating the transaction packet is a request packet, determining the additional field is a completion status field including competition status information in response to the format field and type field together indicating the transaction packet is a completion packet, and determining the additional field is a message code field including message code information in response to the format field and type field together indicating the transaction packet is a message packet, ~~the transmitting device and the receiving device are coupled via a serial interface~~.

16. (Previously Amended). The system of claim 15, wherein the format field and the type field are located in the first byte of the packet header.

17-36. (Canceled).

37. (Currently Amended) The apparatus of claim 6, wherein the packet header is also to include ~~comprises the packet header including~~ a length field~~, the length field~~ to specify the length of ~~payload~~ the data payload in response to the format field specifying the packet includes a data payload.

38. (Currently Amended) The apparatus of claim 37, wherein the transaction layer is to compare the length of the data payload specified in the length field to an actual length of the data payload ~~data~~ and to treat the request transaction packet as malformed request transaction packet based on the actual length not matching the length of the data payload specified in the length field.

39. (New) An apparatus comprising:

a general input/output communication port to implement a communication stack including a physical layer, a data link layer and a transaction layer, the transaction layer to assemble

a packet header for a packet to be transmitted on a serial point-to-point link, the packet header to includes:

a first field to indicate a size of the packet header and to indicate whether the packet is to include a data payload;

a second field to indicate a transaction type of the packet; and

a third field to represent a length of the data payload, in response to the first field indicating the packet is to include a data payload.

40. (New) The apparatus of claim 39, wherein the packer header is also to include a fourth field to include a first type of information in response to the first and second field in combination representing a first packet type and to include a second type of information in response to the first and the second field in combination representing a second packet type.

41. (New) The apparatus of claim 40, wherein a fourth field to include a first type of information in response to the first and second field in combination representing a first packet type and to include a second type of information in response to the first and the second field in combination representing a second packet type. the first field is a format field, the second field, is a transaction type field, and the third field is a length field.

42. (New) The apparatus of claim 40, wherein the fourth field, in response to the first and the second field in combination representing a third packet type, is to include a third type of information, and wherein the first packet type is a request packet type, the first type of information includes byte enable information, the second packet type is a completion packet type, the second type of information includes completion status information, the third packet type is a message packet type, and the third

type of information includes message code information.

43. (New) The apparatus of claim 42, wherein byte enable information includes beginning of a data payload information and end of data payload information, the beginning of a data payload information to indicate whether a first number of bytes at a beginning of the data payload are enabled and the end of data payload information to indicate whether a second number bytes at the end of the data payload are enabled.

44. (New) The apparatus of claim 40, wherein the packet header is also to include a fifth extension field to be associated with the second field in response to the first and the second field in combination representing the first packet type, and to be associated with the third field in response to the first and the second field in combination representing the second packet type.

45. (New) The apparatus of claim 44, wherein the first packet type is selected from a group consisting of a locked memory read request, an I/O read request, and I/O write request, a configuration read type 0, a configuration write type 0, a configuration read type 1, a configuration write type 1, a completion without data, and a completion for locked memory read, and wherein the second packet type is selected from a group consisting of a completion with data, a memory read request, and a memory write request.

46. (New) The apparatus of claim 44, wherein the packet header is also to include an additional field, wherein the additional field is selected from a group consisting of an address field, a requester ID field, a tag field, an attribute field, a completer ID field, and a virtual channel ID field.

47. (New) The apparatus of claim 39, wherein first field further indicates if the data payload is four-byte naturally aligned and limited in size by a maximum data payload size, in response to indicating the packet is to include a data payload.